

REMARKS

This application has been reviewed in light of the Office Action dated July 21, 2005. Claims 1, 3, 5, 10-28, 33, 37-57 and 61-70 are presented for examination, of which Claims 1, 10, 15, 19, 24, 28, 33, 44, 50, 55-57, 61, 65, 69 and 70 are in independent form. Claims 1, 10, 15, 16, 19-22, 24, 25, 28, 33, 44-47, 50, 55-57, 61, 65, 66, 69 and 70 have been amended to define more clearly what Applicants regard as their invention. Favorable reconsideration is requested.

In the outstanding Office Action, Claims 1, 3, 5, 10, 12, 15, 17-19, 21, 24, 28, 33, 44, 46, 50, 55-57, 61, 63-65 and 67-70 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 5,872,569 (Salgado et al.) in view of U.S. Patent 5,671,404 (Lizee et al.) and the newly cited Gauch et al. article, and Claims 11, 13, 14, 16, 20, 22, 23, 25-27, 37-43, 45, 47-49, 51-54, 62 and 66, as being obvious from *Salgado* in view of *Lizee* and U.S. Patent 6,348,971 (Owa et al.).

Independent Claim 1 is directed to a device search system comprising a server unit and a client unit. The client unit comprises first and second request means, and recognition means, as well as output means. The first request means request the server unit to execute a first search in accordance with first search attributes in order to search for a desired device on a network, the first search attributes including a type attribute indicating a device type and a function attribute indicating a device function. The recognition means recognize whether result information obtained from the first search shows a presence or an absence of at least one device, and the second request means request the server unit to execute a second search in accordance with a second search attribute in order to search for a desired device on the network, in response to a recognition by the recognition means that the result information shows the absence of at least one device. According to Claim 1, the

second search attribute is the type attribute extracted from the first search attributes. The output means outputs, for each device searched in the second search, information indicating a device type corresponding to the second search attribute and information indicating to what extent the device meets the function attribute not extracted for the second search attribute from the first search attributes.

Fig. 7 shows an example of the first search condition 701 for the first search attributes that include “printer” as the type attribute and “color print function” and “duplex print function” as the function attribute, and the second search condition 702 for the second search attribute, i.e., “printer”, extracted from the first search attributes. If no matching is obtained in the first search, then the system of Claim 1 displays information on the device type, i.e., “printer” (“scanner” is excluded) and information on the device function, i.e., “OK” for color but “NG” for duplex. Fig. 12 shows that the printer “Mr. Color” is “0” for color but “-” for duplex, and the printer “Second Floor High Speed Machine” is “-” for color but “0” for duplex. See the description for Fig. 9 (especially step S906) and for Fig. 11 (especially steps S1111-S1113).¹

With the system of Claim 1, even if no matching is obtained in the first search, it is possible to find at least one device that partially meets the first search condition.

Salgado relates to a searching database for a desired device by repeatedly changing the scope of search. In the flowchart of Fig. 10, the scope of search is limited or expanded in steps 230 and 232, and an additional search is executed based on the new scope of search in step 234. The number of found devices (instances) is conveyed to the

^{1/} It is to be understood of course that the claim scope is not limited by the details of this or any other embodiment that may be referred to.

user in step 236. If that number is acceptable to the user in step 238, then the devices are displayed in step 240.

Lizee relates to an executing device search in the following search conditions:

- (a) after one search is executed based on a certain search condition, the next search is executed based on the search condition plus another search condition;
- (b) if no match is obtained in a search based on a certain search condition, the search condition is excluded for subsequent search; and
- (c) when the search result reaches an acceptable number of devices, the search is terminated.

Gauch relates to modifying a search condition (word) to include some attributes, such as parents, child and brother, and determining in what order such attributes should be applied in a search.

Initially, as conceded in the Office Action, Claim 1 is not taught or rendered obvious by *Salgado* and *Lizee*, taken separately or in any permissible combination (if any). Moreover, Applicants submit that nothing has been found in *Gauch* that would teach or suggest the use of the particular first search attributes, nor of the second-search attribute, recited in Claim 1. Moreover, nothing in that patent (or the other two documents) is believed to teach or suggest the display means, or the manner in which the results of the searches are displayed. For all these reasons, and even assuming for argument's sake that the proposed combination of references would be a proper one, Claim 1 is believed to be allowable thereover.

Claims 10 (to the client apparatus) and 15 (to the server apparatus) are similar to Claim 1 in respects relevant to the following remarks, and method Claims 19 and

24, storage-medium Claims 28 and 33, program Claims 44 and 50 and apparatus Claims 55-57 (in non-means-plus-function format) all correspond to one or another of Claims 1, 10 and 15. Accordingly, these claims are also believed to be allowable, for the same reasons as those advanced above with regard to Claim 1.

Claim 61 is directed to an arrangement in which as amended recites first search attributes used in first search condition include a type attribute indicating a device type and a function attribute indicating a device function, and that an extraction unit extracts the type attribute from the first search attributes for use as a second search condition. Moreover, according to Claim 61, a second display unit displays, for each device completely meeting the second search condition, information indicating a device type corresponding to the type attribute and information indicating to what extent the device meets the function attribute not extracted for use as the second search attribute from the first search attributes.

Claim 61 is believed to be allowable over the cited art for at least the reasons advanced above with regard to Claim 1.

Owa relates to a printer selection device which classifies the priority into A (highest), B (preferable) or the like, and gives high score to printers satisfying a B item among printers satisfying all A items, and selects the printer with the highest score as the optimum printer (see Fig. 6). Nonetheless, nothing has been found in *Owa* that would supply what is missing from the documents discussed above as prior art against Claim 61, which accordingly is believed to be allowable over the art applied against it.

Independent Claims 65 (method), 69 (storage medium) and 70 (program) are similar to Claim 61 in regard to the foregoing, and are also believed to be allowable over the art discussed above, for the reasons given above.

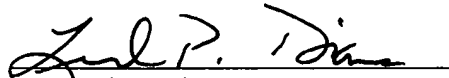
A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and allowance of the present application.

Applicants' undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Leonard P. Diana", is written over a horizontal line.

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